UNITED
NATIONS

E

Economic and Social Council

Distr.
GENERAL

E/C.10/1992/2
16 December 1991

ORIGINAL: ENGLISH

COMMISSION ON TRANSNATIONAL CORPORATIONS
First part of the eighteenth session
23-24 January 1992

TRANSNATIONAL CORPORATIONS AND SUSTAINABLE DEVELOPMENT: RECOMMENDATIONS OF THE EXECUTIVE DIRECTOR

Report of the Secretary-General

SUMMARY

This report proposes five core programme areas in which large enterprises, including transnational corporations, can contribute to the goals of sustainable development: (a) global corporate environmental management; (b) risk and hazard minimization; (c) environmentally sounder consumption patterns; (d) full-cost environmental accounting; and (e) environmental conventions, standards and guidelines. The specific recommendations under each programme area derive from the existing practices of environmentally leading businesses. The recommendations also address other actors, particularly Governments and international organizations, since incentives and regulatory standards can allow markets to function more effectively.

In line with the format for the United Nations Conference on Environment and Development, the recommendations are set out in terms of sustainable development objectives, specific activities and means of implementation. Target dates are also suggested to operationalize the recommendations into action-oriented and practicable efforts.

CONTENTS

		Paragraphs	Page
INTRODUCTION		1 - 7	3
I.	SUMMARY OF OBJECTIVES	8 - 12	4
II.	GLOBAL CORPORATE ENVIRONMENTAL MANAGEMENT	13 - 23	7
III.	RISK AND HAZARD MINIMIZATION	24 - 35	11
IV.	ENVIRONMENTALLY SOUNDER CONSUMPTION PATTERNS	36 - 44	15
V.	FULL-COST ENVIRONMENTAL ACCOUNTING	45 - 52	17
VI.	ENVIRONMENTAL CONVENTIONS, STANDARDS AND GUIDELINES	53 - 61	20

INTRODUCTION

1. The challenge of environmentally sustainable economic development calls for new and effective partnerships among all the economic and political actors, including Governments, businesses and international organizations. In the context of this partnership, the specific roles and responsibilities of transnational corporations ensue from their unique management aspects, the breadth of their corporate networks, the range of their technological resources and the international consequences of their decision-making. Directing such a range of capabilities towards environmental protection and economic development could make a substantial contribution to sustainable development.

2. A number of corporations have already taken steps in this direction. The activities of these pioneers demonstrate that environmental and economic excellence are compatible. Their activities clearly show, for example, that resource recovery and recycling produce both an environmentally desirable and an economically beneficial outcome; that durable and energy-efficient products not only make good economic sense but are also requisites for good environmental management. Macroeconomic data also show that environmental leadership and competitive advantage are closely linked: the market leaders in new technologies are firms from home countries which have strong regulatory standards; within countries, firms operating in sectors with high environmental costs have strengthened their international trade performance. 1/ Within these emerging experiences, both market forces and national environmental regulation play a key role.

3. Notwithstanding the positive trend towards corporate-wide environmental awareness, the potential of corporations to contribute to sustainable development is far from being fully realized. Recent surveys indicate that many basic areas of environmental management remain unaddressed and that the contribution of corporations to the greater transfer and use of environmentally sound technologies, for example, can be increased with adequate market incentives, 2/ and more uniform environmental rules and standards.

4. Against this background, the Economic and Social Council adopted resolution 1991/55 of 26 July 1991, in which it requested the Executive Director of the United Nations Centre on Transnational Corporations, after extensive consultations with international business organizations and other relevant bodies, to prepare action-oriented and practicable recommendations on cooperation for protection and enhancement of the environment in all countries. Subsequently, the Preparatory Committee of the United Nations Conference on Environment and Development requested the full integration of development considerations and needs and realities, in particular of the developing countries, in all Agenda 21 programme documents, indicating in that regard, inter alia, large industrial enterprises, including transnational corporations, business practices and environment. 3/

5. The recommendations of the Executive Director, as set out below, are grouped under five key programme areas: (a) global corporate environmental management; (b) risk and hazard minimization; (c) environmentally sounder consumption patterns; (d) full-cost environmental accounting; and (e) environmental conventions, standards and guidelines. The programme areas stem from themes identified by the Commission on Transnational Corporations at its seventeenth session as integral components of sustainable development. 4/

6. The text below provides, for each of the five programme areas, details on the operational steps by which corporations, in cooperation with Governments and international organizations, can make a significant contribution to sustainable development. In line with the format established for the United Nations Conference on Environment and Development, each programme area starts with a basis for action, followed by objectives, activities and means of implementation. Target dates are suggested to reflect current best practices by transnational corporations and the minimum time required to reach the overall objectives.

7. The recommendations are the synthesis of a wide range of existing intergovernmental resolutions, conventions and declarations, corporate policy statements and trade association guidelines, the results of the corporate environmental survey carried out by the United Nations Centre on Transnational Corporations, 5/ and guidance from expert advisers in business, academia, Governments and non-governmental organizations. The breadth of the input is documented throughout the text and relevant extracts from policy texts are included in the notes.

I. SUMMARY OF OBJECTIVES

Global corporate environmental management

8. The common elements in the companies pursuing the best practices are clear corporate environmental policies, institutional structures and reporting systems for monitoring the progress made towards sustainable development (see E/C.10/1991/3, para. 17 (c)). Specific objectives of this programme area are:

(a) Development of globally applicable corporate policies for the shift towards sustainable development. Achieving this objective involves the preparation of a formal, corporate-wide policy statement on the firm's commitment to sustainable development and its subsequent dissemination throughout the corporate structure, in all appropriate languages;

(b) Establishment or strengthening of global corporate environmental management systems and organizational structures in order to supervise and monitor the adjustment to a sustainably managed corporation. Major steps in establishing these systems entail the integration of environmental and developmental goals into all corporate incentive and compensation programmes and designation at each facility of senior officials responsible for environmental matters;

(c) Integration of corporate environmental concerns into the sustainable development needs of host countries. This involves the examination of the firm's impact on the environment and development needs of the host country by taking into account affiliate input in corporate decision-making;

(d) Implementation of the corporate programmes and practices required to support environmental and developmental goals in all operations throughout the world. Achieving this objective entails the adoption of a product stewardship strategy, supported by training and education programmes to increase management and employee knowledge of the corporation's sustainable development policy.

Risk and hazard minimization

9. Risk and hazard minimization promotes sustainable development goals through the assessment and anticipation of environmental risks, the analysis and monitoring of environmental problems, and through awareness-building (see E/C.10/1991/3, para. 17 (d)). Specific objectives of this programme area are:

(a) Conduct of environmental practices on a consistently high basis in all operations throughout the world. To fulfil this objective, corporationslcan apply risk assessment and hazard analysis techniques on a corporate-wide basis and provide all operations with adequate knowledge, skills and equipment;

(b) Reduction of emissions and waste at the source through input and process change, rather than reliance on end-of-pipe treatment. Source reduction involves the monitoring of effluent emissions at all operations throughout the world, improvement of material and energy efficiency and use of environmentally sounder technologies;

(c) Phasing out or minimization of the use and export of highly hazardous processes, product and services throughout the enterprise's operations. Hazard minimization entials corporate assessment of the environmental and health consequences of the firm's activities, supported by governmental efforts to publicize priority lists of high hazard chemicals, processes and services.

Environmentally sounder consumption patterns

10. Focusing on environmentally sounder consumption patterns enables forward-looking management to identify future markets, new products and new investments to replace environmentally degrading activities that need to be phased out (see E/C.10/1991/3, para. 34). Specific objectives of this programme area are:

(a) Informing workers, distributors, retailers, consumers and communities of the actual and possible environmental effects of the firm's products and of the steps that they can take to mitigate any adverse effects. The increase of environmental information flows throughout the enterprise, development of common user information disclosure standards and provision of

product safety and risk information to local communities are primary components in achieving this objective;

(b) Development and redesign of products and services for the shift towards a sustainable lifestyle. The promotion of product durability through company-wide quality control efforts and emphasis on environmental soundness in the firm's product mix help to support the shift towards a sustainable lifestyle.

Full-cost environmental accounting

11. Internalizing all long-term environmental costs in the accounting process is vital to measure adequately the value of natural resources and environmental services (see E/C.10/1991/3, para. 66). Specific objectives of this programme area are:

(a) Inclusion of environmental considerations in corporate accounting and reporting in order to relate an enterprise's environmental activities to its financial position and performance. Initial steps in developing environmental accounting and reporting practices involve the separation of environmental expenditure from other expenditure and measuring of the firm's environmental liabilities;

(b) Incorporation of the full environmental costs into the production of goods and services in order to send the right price signals to producers and consumers. Full environmental costing entails payment for the use of common environmental resources, removal of price distortions due to government programmes affecting land, water, energy and other natural resources, and implementation of investment and trade policies that discourage the excessive use of natural resources;

(c) Development of accounting and reporting methods in order to encompass sustainable development considerations in the calculation of financial results. Incorporating sustainable development concerns in financial calculations requires the redefinition of asset and liability boundaries to include public goods (such as air and water quality, biodiversity) and development of prototype accounts for measuring resource use.

Environmental conventions, standards and guidelines

12. Environmental conventions, standards and guidelines can help to achieve an international consensus on minimum standards of corporate environmental behaviour (see E/C.10/1991/3, para. 19). Specific objectives of this programme area are:

(a) Compliance with and further development of international and regional environmental guidelines and instruments. Increasing corporate use of intergovernmental instruments involves the encouragement of consultation with business actors in the development of guidelines and standards and ensuring their availability throughout the corporate structure;

(b) Compliance with and further development of national environmental law. Achieving this objective requires governmental efforts in the establishment or strengthening a regulatory environment supportive of sustainable development and making available all appropriate national laws and regulations;

(c) Compliance with and further development of industry trade association standards and guidelines. By adopting and implementing the highest practicable industry-agreed guidelines and developing accountability standards for such guidelines, corporations can demonstrate self-regulatory leadership.

II. GLOBAL CORPORATE ENVIRONMENTAL MANAGEMENT

A. Basis for action

13. Managerial leadership in the adoption of consistently high environmental policies is the key to promoting a global standard of corporate responsibility, even ahead of changes in national and international law. Managerial policies can encourage a corporate culture based upon sustainable development values. 6/ In order to institutionalize the corporate-wide environment and development policies, however, supportive corporate programmes and organizational structures are needed. Corporate efforts to integrate environment, health and safety goals into performance appraisals, organizational structure and education and training are the key to linking sustainable development with daily decision-making.

B. Objectives

14. The following objectives will require the coordinated efforts of corporations, Governments and international organizations:

(a) Development, within five years, of globally applicable corporate policies for the shift towards sustainable development; 7/

(b) Establishment or strengthening, within 10 years, of global corporate environmental management systems and organizational structures in order to supervise and monitor the adjustment to a sustainably managed corporation; 8/

(c) Integration, within 10 years, of corporate environmental concerns into the sustainable development needs of host countries;

(d) Implementation, within 15 years, of the corporate programmes and practices required to support environmental and developmental goals in all operations throughout the world. 9/

C. Activities

15. The managerial tasks for corporations are to:

(a) Recognize sustainable development as among the highest of corporate priorities; 10/ develop, withinin one year, formal corporate-wide policy statement regarding the firm's commitment to sustainable development; 11/ establish, within two years, specific operational policies (e.g., on water, air and soil protection) 12/ and, within four years, sector-specific policies (i.e., on agriculture, mining, textiles and electronic production);

(b) Adopt a "cradle-to-grave" product life-cycle management strategy 13/ for overseeing the integration of environmental criteria into the firm's complete range of products, processes and services;

(c) Examine the impact of the firm's activities on the global commons and on the environment and development of host countries; 14/

(d) Identify, within three years, the programmes required to support the firm's environment and development policy statement for all operations throughout the world and, within seven years, initiate these programmes.

16. The managerial tasks for Governments and international organizations are to:

(a) Make sustainable development objectives and aims as clear, stable and understandable to corporations as possible; 15/ adopt sustainable development criteria and guidelines in government regulatory requirements and incentive programmes; devise regulatory and/or incentive frameworks in order to encourage a "cradle-to-grave" product life-cycle approach; 16/

(b) Implement, within two years, programmes for gathering information on corporate operational policies, programmes and technologies conducive to sustainable development; establish, within seven years, an international database and information exchange network as a means of providing corporations and Governments with information regarding successful corporate policies, programmes and technologies; 17/

(c) Establish an internationally recognized award for the leading sustainably managed corporations.

17. The data and information tasks for corporations are to:

(a) Disseminate, within two years, the general environmental policy statement and corporate-wide operational policies in appropriate languages to all home country plants and affiliates and to joint venture partnerships in host countries 18/ and, within four years, disseminate these policies and statements to licensees, customers, suppliers and subcontractors;

(b) Prepare and perform, on a regular basis, environmental audits covering all home and host country operations; 19/ measure the performance of affiliates against both international and internal corporate standards. 20/

18. Tasks in the area of international and regional cooperation and coordination are to:

(a) Develop and implement, within three years, a formal liaison programme between transnational corporate affiliates and host Governments for mutual consultation and advice on sustainable development issues; 21/ create, within five years, an international advisory body composed of experts from all concerned parties in order to help promote international policies for the health and safety of workers and for the protection and preservation of the environment; 22/

(b) Establish information exchange networks among national, regional, and international research and development institutions; 23/ create programmes on sustainable development management in academic institutions;

(c) Implement cooperative programmes for the transfer of environmentally sounder technology between transnational corporations and host country firms and local governments. 24/

D. Means of implementation

19. The financial and cost evaluation tasks for corporations are to:

(a) Establish corporate policies which encourage voluntary contributions in support of non-governmental organizations undertaking sustainable development projects, particularly in host developing countries; 25/

(b) Give preference to corporate investment in funds and investments which are compatible with sustainable growth; establish sustainability factors as a key criterion in determining lending policies for potential investment candidates; 26/

(c) Forego activities with firms and other entities which do not meet acceptable local, national and international environmental, health and safety standards.

20. The scientific and technological tasks for corporations are to:

(a) Update, every five years, corporate-wide policies, programmes and practices in the light of the most recent technical developments and scientific understandings;

(b) Conduct sustainable development impact assessments for all prospective investments, divestments and large management contracts; conduct, within five years, a periodic assessment of the corporation's impact upon the

local economic and social conditions in the host country, in particular in a host developing country;

(c) Encourage research and development units to conduct environmental impact assessment studies for new technologies, products and services both prior to and during the development phase.

21. The human resource development tasks for corporations are to:

(a) Integrate, within five years, environmental and developmental goals into all corporate incentive and compensation programmes;

(b) Structure lines of responsibility so as to reflect the critical role of environment and development in managerial decision-making; 27/ designate, within one year, an executive at headquarters and a senior official at the affiliate level responsible for environmental matters; 28/ designate, within two years, a specific officer or committee at the board of directors level responsible for environmental matters; 29/ and, within five years, report to the officer or committee on the progress made by the firm in the implementation of the goals of the United Nations Conference on Environment and Development; 30/

(c) Educate, within three years, senior management throughout the world about corporate sustainable development culture, goals and policies; 31/

(d) Sponsor, within two years, training programmes 32/ for host country managers and employees on environmental protection, resource management and sustainable development; 33/ create scholarships for host country employees at technical, trade union, engineering and management schools in order to build their environmental capabilities.

22. The capacity-building tasks for corporations are to:

(a) Evaluate, within one year, the capacity of affiliates, subcontractors and suppliers to manage their assigned tasks safely; 34/ within five years, include in all affiliate, subcontractor and supplier contracts instructions detailing environmental responsibilities; 35/

(b) Engage, within five years, affiliates in decision-making in order to enable them to contribute to the economic and environmental development of the countries in which they operate. 36/

23. The capacity-building tasks for Governments and international organizations are to:

(a) Provide technical assistance to host Governments on sustainable corporate management techniques, fully utilizing local technical knowledge and experience;

(b) Assist small and medium-sized enterprises in developing countries in the education and training of management and employees in sustainable development issues;

(c) Identify, within one year, critical issues regarding the local economic and social conditions that need to be considered by an environmental and development impact assessment 37/ and, within five years, devise solutions involving those critical issues.

III. RISK AND HAZARD MINIMIZATION

A. Basis for action

24. Promoting risk minimization in all corporate functions is a requisite for furthering environmental protection and ensuring employee health and safety. In most industrialized countries, enterprises must provide notification of risk in connection with the construction and operation of facilities, the quantity of highly toxic chemicals, and spills, accidents and worker fatalities and injuries. 38/ Developing countries, however, often lack stringent environmental and worker health and safety regulations. When regulations exist, implementation and enforcement may be ineffective due to a lack of resources, training, equipment and staff. Because transnational corporations are familiar with best-practice technologies and comply with regulatory requirements in their home countries, they can make a significant positive contribution to worker health and safety, environmental protection and resource conservation on a world-wide basis. This contribution is especially valuable in countries where the regulatory regime is below the minimum acceptable standards.

B. Objectives

25. The following objectives will require the coordinated efforts of corporations, Governments and international organizations:

(a) Conduct, within five years, of environmental practices on a consistently high basis in all operations throughout the world; 39/

(b) Reduction, within 10 years, of emissions and waste at the source through input and process change, rather than reliance on end-of-pipe treatment; 40/

(c) Phasing out 41/ or minimization, 42/ within 15 years, of the use and export of highly hazardous processes, products and services throughout the enterprise's operations.

C. Activities

26. The managerial tasks for corporations are to:

(a) Assess, on a periodic basis, the environmental and health consequences of corporate operations 43/ and make every reasonable effort to restore the environment when it is harmed by the firm's activities. 44/ Every five years, anticipate potentially catastrophic events and outline responses;

(b) Adopt the precautionary principle 45/ by taking action favouring the protection of the environment in situations where scientific uncertainty cannot be eliminated; 46/

(c) Assist workers and union representatives in the identification of potential occupational and environmental hazards 47/ and avoid taking discriminatory action against those who report conditions that may create a danger to the environment or pose health and safety hazards. 48/

27. The managerial tasks for Governments and international organizations are to:

(a) Establish and maintain a regulatory structure with adequate enforcement capabilities for worker health and safety, pollution prevention and natural resource conservation; within five years, ensure that at least one governmental agency is specifically responsible for the protection of the environment and worker safety training; ensure that this agency has adequate resources to perform its functions;

(b) Establish and enforce national multimedia (e.g., air, land and water) environmental standards, zoning ordinances and permit systems. 49/

28. The data and information tasks for corporations are to:

(a) Maintain up-to-date environmental, health and safety information for all products and processes used throughout the world 50/ and distribute the firm's environmental safety manuals to all employees in all working languages;

(b) Follow consistently high practices with regard to product warning labels for transport and storage 51/ and instructions for safe use and disposal; 52/ within three years, survey national disclosure requirements in all operations and ensure compliance;

(c) Monitor effluent and emission discharges at all operations throughout the world; 53/ within five years, publish aggregate data for major pollutants; 54/

(d) Establish effective information exchange links between controlled affiliates and local businesses regarding newly discovered environmental hazards and resource conservation methods; 55/ make available to affiliates, 56/ within an appropriate time-frame, environmentally sounder

technologies and related discoveries from their introduction elsewhere within the enterprise 57/ and, within the same time period, provide information regarding these technologies and discoveries to licensees and joint venture partnerships;

(e) Introduce into technology sales and management contracts provisions on accident avoidance 58/ and safety standards. 59/

29. The data and information tasks for Governments and international organizations are to:

(a) Strengthen national capacities to monitor industrial emissions and discharges; authorize professional bodies to assist in monitoring environmental compliance;

(b) Develop safety information networks for consumers, workers and communities; 60/ survey, within five years, international safety disclosure practices and those of other countries and incorporate them into national legislation;

(c) Publicize priority lists of high hazard chemicals, processes and services; 61/ provide clearing-house functions for new national regulations governing hazardous and toxic products, processes and services.

30. Tasks in the area of international and regional cooperation and coordination are to:

(a) Assist in the development of regional and international emergency preparedness and contingency plans to reduce the frequency and impact of large-scale environmental accidents; develop, within three years, common emergency planning standards and requirements; establish, within 10 years, regional centres to support businesses and communities in the preparation of contingency plans for high-risk and high-hazard plants;

(b) Establish appropriate consultative mechanisms for the periodic assessment of international environmental standards and regulations in order to keep abreast of advances in scientific and technical knowledge; 62/

(c) Provide technical assistance to host country Governments on risk assessment, monitoring techniques, hazard analysis and related specialized skills. 63/

D. Means of implementation

31. The financial and cost evaluation tasks for corporations are to:

(a) Announce clear financial commitments and achievable target dates for expanded research and development efforts in order to raise the corporation's inventory of nature-sparing and nature-enhancing technologies;

(b) Identify existing facilities that are economically and/or environmentally unsound to operate owing to resource and energy inefficiencies or the level of hazardous waste generated, and prepare an accelerated schedule to replace or retrofit them to environmentally sounder facilities. 64/

32. The financial and cost evaluation tasks for Governments and international organizations are to:

(a) Provide economic incentives to investors using environmentally sounder technological processes and products while discouraging those who do not support public research and development facilities specifically for the development of environmentally sounder technology;

(b) Provide financial resources through multilateral development banks and agencies in order to facilitate the transfer of environmentally sounder technology on concessional terms. 65/

33. The scientific and technological tasks for corporations are to:

(a) Apply, within five years, risk assessment and hazard analysis techniques to the firm's full range of products, processes and services; 66/ utilize the most recent available scientific knowledge in the design of new products, processes and services in order to prevent serious or irreversible environmental degradation; 67/

(b) Develop materials and energy recovery technologies and practices in order to minimize waste discharges, 68/ as well as new techniques and technologies for the repair of environmental damage; 69/

(c) Ensure, within 15 years, that processes exist to either recycle or safely discard the firm's high-risk and high-volume products. 70/

34. The scientific and technological tasks for Governments and international organizations are to:

(a) Assist in the development of risk assessment methodologies, and provide technical assistance and training in their use;

(b) Develop uniform classification systems for health, safety and ecological data, and provide international access thereto;

(c) Ensure, within three years, that the regulations and infrastructure needed to support efficiency in recycling and the use of material and energy, as well as the efficient use of environmentally sounder technologies, are in place.

35. The capacity-building tasks for corporations are to:

(a) Provide all affiliates with adequate knowledge, skills and equipment in order to minimize the risk of accidents and damage to health and the

environment; 71/ provide, within two years, standardized staff training 72/ at all local plant sites; 73/ at least every three years, audit operations in order to determine if knowledge, skills and equipment are maintained at a consistently high level;

(b) Provide technological know-how to local governments and businesses in order to enhance their ability to absorb the most recent environmentally sounder technologies; 74/

(c) Utilize fully local technical knowledge and solutions when they are environmentally and/or economically superior.

IV. ENVIRONMENTALLY SOUNDER CONSUMPTION PATTERNS

A. Basis for action

36. The rapid consumption of natural resources beyond nature's ability to replenish and regenerate them diminishes the quality of life throughout the world. A large volume of these resources are used unwisely. Product information regarding environmentally sounder alternatives can help to transform world consumption patterns. In the industrialized countries, eco-labelling and environmental green seals are two of the newer tools to assist consumers in making environmentally sounder choices. In developing countries and countries in transition, consumers should be able to choose products that do not place an unfair burden on their natural resource base. Corporate product development and marketing practices should incorporate these new directions.

B. Objectives

37. The following objectives will require the coordinated efforts of corporations, Governments and international organizations:

(a) Informing, within five years, workers, distributors, retailers, consumers and communities of the actual and possible environmental effects of the firm's products and of the steps that they can take to mitigate any adverse effects; 75/

(b) Development and redesign, within 15 years, of products and services for the shift towards a sustainable lifestyle. 76/

C. Activities

38. The managerial tasks for corporations are to:

(a) Promote product durability and longevity through company-wide quality control programmes; emphasize the value-added aspects of products and

services over the increased consumption of disposable and/or readily obsolescent products;

(b) Alter the firm's product mix in order to support the transition to sustainable lifestyle arrangements in developed countries; avoid introducing, through advertising or other means, unsustainable consumption patterns, particularly in newly developing markets;

(c) Establish, when appropriate, a marketing commitment to distribute environmentally sounder products and services in all regions. 77/

39. The data and information tasks for corporations are to:

(a) Ensure effective access to, and dissemination of, key environmental documentation throughout the enterprise as soon as the information becomes available; 78/

(b) Disseminate relevant environmental, toxicological, epidemiological and social data developed from impact assessments;

(c) Develop marketing strategies emphasizing the environmental aspects of the firm's products, processes and services, while maintaining accurate information on any related risks.

40. The data and information tasks for Governments and international organizations are to:

(a) Develop common information disclosure standards so that users can receive a comparative assessment of a given product's energy and material efficiency and waste generation potentials;

(b) Provide technical assistance to Governments and non-governmental organizations for the evaluation of safety data submitted for public decision-making;

(c) Enact and enable, within 10 years, standard community right-to-know and right-to-act legislation in order to increase access to environmental information;

(d) Harmonize, within 10 years, eco-labelling standards and terms.

41. Tasks in the area of international and regional cooperation and coordination are to:

(a) Initiate and maintain liaison among all concerned parties on product safety issues;

(b) Establish national and regional cooperative mechanisms for the enhancement of product monitoring, assessment and hazard forecasting capacities.

D. Means of implementation

42. The financial and cost evaluation tasks for Governments and international organizations are to:

(a) Establish, within five years, public purchasing requirements that support the growth of environmentally sounder products, processes and services;

(b) Retain the patent rights for environmentally sounder technologies resulting from nationally funded research and development;

(c) Develop, within three years, additional mechanisms (e.g., tariffs, taxes and purchase requirements) to facilitate the transfer of environmentally sounder technologies.

43. The scientific and technological tasks for corporations are to:

(a) Design new products and services which are safe, energy efficient, conserve resources, and have extended durability and minimal environmental impact; 79/ undertake, within five years, a survey to identify the aspects of existing products and services for which environmental improvement is necessary;

(b) Adapt, within 10 years, products and services manufactured or distributed in host countries so as to reflect development needs, geographical conditions and environmental circumstances; progressively remove from the market products that cannot be used safely.

44. The human resource development tasks for corporations are to:

(a) Provide sufficient data to local communities on risks and safety procedures and related environmental data so that they can make informed decisions; 80/

(b) Implement joint research and development programmes with local enterprises for new products and services compatible with sustainable development, including those associated with local geographical and socio-economic conditions (e.g., dry land farming and small-scale producers).

V. FULL-COST ENVIRONMENTAL ACCOUNTING

A. Basis for action

45. The failure to account for the depletion and degradation of natural resources distorts product costs and prices and leads to unsustainable production and consumption patterns. Current accounting practices report only market transactions and do not record the full cost of natural resource use. No direct costs are assigned to the consumers of common goods, such as air and water. Environmental accounting studies indicate that few corporations have

adopted environmental accounting procedures. 81/ Internalizing all long-term environmental costs in the accounting and reporting process is a vital operational requirement for sustainable development. Achieving this goal requires the development of new accounting rules and financial statements. There is a need for new valuation methods for quantifying the unrecorded costs of non-sustainable development to be devised.

46. Governments can take supportive steps to ensure that market price signals will reflect full environmental costs. They can: adopt the "polluter pays" principle which requires the polluter to internalize the costs of pollution prevention; adopt other economic incentives, such as tradeable permits, user fees and deposit refund systems; and remove price distortions in existing governmental programmes that cause natural resources to be underpriced.

B. Objectives

47. The following objectives will require the coodinated efforts of corporations, Governments and international organizations:

(a) Inclusion, within five years, of environmental considerations in corporate accounting and reporting in order to relate an enterprise's environmental activities to its financial position and performance; 82/

(b) Incorporation, within 10 years, of full environmental costs into the production of goods and services in order to send the right price signals to producers and consumers; 83/

(c) Development, within 10 years, of accounting and reporting methods in order to encompass sustainable development considerations in the calculation of financial results.

C. Activities and means of implementation

48. The managerial tasks for corporations are to:

(a) Provide, within three years, relevant environmental information in their financial statements to shareholders, creditors, employees, governmental authorities, consumers and the public; separate environmental expenditure from other expenditure; 84/ measure and separate environmental liabilities arising from compliance with environmental regulations from other liabilities; 85/ develop a programme of environmental auditing; 86/

(b) Ensure that compensation is provided to those directly and adversely affected by the environmental harm caused by the enterprise; 87/

(c) Redefine, within five years, asset and liability boundaries in order to include public goods, such as air and water quality and biodiversity, in a manner consistent with sustainable development;

(d) Develop and use prototype accounts that measure resource use and, within 10 years, link resource use to financial statements through appropriate valuation methods; 88/

(e) Utilize the results of sustainable development accounting in order to improve sustainable development management.

49. The managerial tasks for Governments and international organizations are to:

(a) Remove, within five years, price distortions arising from governmental programmes affecting land, water, energy and other natural resources; 89/

(b) Review existing accounting and reporting regulations and develop new ones which require more transparent reporting, within five years;

(c) Develop, within 10 years, methods and rules for accounting for sustainable development, including the "polluter pays" principle. 90/

50. The data and information tasks for Governments, international organizations and corporations are to:

(a) Develop, within 10 years, a national natural resource inventory based on corporate use of renewable and non-renewable resources;

(b) Prepare, every five years, sustainable development reports at the corporate level, using new prototype accounts and statements showing income on a sustainable basis and, within 10 years, include in those reports environmental and development items covering the corporation's impact in developing countries, as well as a statement by the Board of Directors on the status of the corporation's transition to a sustainably managed corporation. 91/

51. Tasks in the area of international and regional cooperation and coordination are to:

(a) Review, within five years, investment and trade policies in order to remove distortions in pricing and the barriers that often encourage excessive use and dependence on imports and exports of natural resources; 92/

(b) Harmonize, within five years, accounting rules for financial statements which incorporate environmental considerations;

(c) Develop, within 10 years, common accounting rules for sustainable development.

52. The capacity-building tasks for Governments and international organizations are to:

(a) Support practical research for the development of new prototype statements and methods for valuing all environmental resources; 93/

(b) Encourage the retraining of auditors in environmental accounting and reporting so that they can verify that the financial statements give a true and fair view of the enterprise's activities and reflect the full environmental costs of production.

VI. ENVIRONMENTAL CONVENTIONS, STANDARDS AND GUIDELINES

A. Basis for action

53. To support corporate efforts in global environmental management, clear environmental conventions, standards and guidelines are required. Although an increasing number of international environmental policy declarations, resolutions, guidelines, codes of conduct and conventions have emerged, national regulations are the dominant influence on corporate environmental policy. As a result of the uneven development of environmental law, the coordination of international, regional and national policies and instruments is urgently required. Corporations are also able to play an integral role in shaping the future direction of sustainable development through the implementation of industry-agreed environmental standards and guidelines. Corporate self-regulating leadership builds an atmosphere of trust amongst all concerned parties. Self-regulation in conjunction with supportive governmental efforts is fundamental to building, between business and Government, a substantive partnership aimed at sustainable development.

B. Objectives

54. The following objectives will require the coordinated efforts of corporations, Governments and international organizations:

(a) Compliance with and further development of international and regional environmental guidelines and instruments;

(b) Compliance with and further development of national environmental law;

(c) Compliance with and further development of industry trade association standards and guidelines. 94/

C. Activities

55. The managerial tasks for corporations are to:

(a) Apply the highest practicable principles and standards for environmental protection equivalently throughout the firm's global

operations; 95/ survey, within three years, corporate practices in order to ensure that the highest practicable standards are used consistently in all operations throughout the world;

(b) Conform to the provisions of international and regional environmental standards, guidelines and conventions 96/ to the extent that they are applicable to corporate activities, even though not mandatory under national law;

(c) Observe all national and local laws and regulations for environmental protection, subject to the overriding responsibility to conform with regional and international standards; 97/

(d) Adopt and implement policies and programmes in accordance with the highest practicable industry-agreed guidelines. 98/

56. The managerial tasks for Governments and international organizations are to:

(a) Develop incentives which encourage corporations to adopt sustainable development policies and programmes; 99/

(b) Enforce environmental laws and regulations, regardless of forms of ownership;

(c) Improve world-wide regulatory consistency through the incorporation of internationally agreed principles and standards in national legislation within five years of their international approval if not explicitly stated in the agreement;

(d) Address in future environmental instruments the rights and responsibilities of transnational corporations.

57. The data and information tasks for Governments and international organizations are to:

(a) Ensure that transnational corporations have the texts of all appropriate international and regional conventions and guidelines, and national regulations and guidelines;

(b) Establish or strengthen a regulatory environment supportive of sustainable development;

(c) Assist, within five years, in the dissemination of information on industry-agreed guidelines and standards, especially to small and medium-sized enterprises. 100/

D. Means of implementation

58. The financial and cost evaluation tasks for Governments and international organizations are to:

(a) Develop and offer incentives for the development and implementation of corporate standards that exceed national and/or internationally agreed standards, laws and regulations;

(b) Encourage and offer incentives for research and development technology that contribute to sustainable development and economic progress.

59. The scientific and technological tasks for corporations are to:

(a) Encourage, every five years, international industry groups to re-examine and update industry guidelines in order to incorporate the most recent scientific understandings and technical developments;

(b) Develop standards for accountability on compliance with such updated guidelines. 101/

60. The scientific and technological tasks for Governments and international organizations are to:

(a) Survey, within one year, standards established by Governments, in order to benefit from a comparative evaluation and, within five years, incorporate the best standards determined by that evaluation in national legislation and regulations;

(b) Provide adequate means to ensure protection of the property rights of corporations that transfer environmentally sounder technology;

(c) Assist, at the request of host Governments, in the development and implementation of environmental standards and guidelines;

(d) Establish, within 10 years, an independent international monitoring body, to monitor the progress made in the development of environmental standards, including industry guidelines;

(e) Survey, every five years, industry and corporate guidelines in order to include new and appropriate industry standards, including those related to technological advances, in governmental rules and policies.

61. The capacity-building task for Governments and international organizations is to provide assistance in strengthening the capacity of developing countries to include sustainable development considerations in negotiations with foreign investors and technology suppliers.

Notes

1/ Michael E. Porter, "America's Green Strategy", Scientific American (April 1991), p. 168.

2/ See United Nations, United Nations Centre on Transnational Corporations, Benchmark Corporate Environmental Survey, (ST/CTC/SER.C/1-5). See also: surveys by McKinsey and Company, The Corporate Response to the Environmental Challenge (Amsterdam, Netherlands, 1991); Deloitte Touche and Stanford University, The Environmental Transformation of United States Industry: A Survey of United States Industrial Corporations (Stanford, Connecticut, 1990); Tufts University, Center for Environmental Management, Multinational Corporations and the Environment: A Survey of Global Practices (Boston, Massachusetts, 1991); and United Nations, United Nations Centre on Transnational Corporations project on options to facilitate the transfer of environmentally sound technologies to developing countries under favourable terms (New York, 1991).

3/ See Official Records of the General Assembly, Forty-sixth Session, Supplement No. 48 (A/46/48), vol. II, annex I, decision 3/2.

4/ See Official Records of the Economic and Social Council, 1991, Supplement No. 10 (E/1991/31-E/C.10/1991/17), chap. I, sect. A, draft resolution II. The draft resolution was subsequently adopted by the Economic and Social Council (resolution 1991/55 of 26 July 1991).

5/ See Benchmark Corporate Environmental Survey ....

6/ United Nations, United Nations Centre on Transnational Corporations, Criteria for Sustainable Development Management (to be issued). See also the report of the Secretary-General concerning the contribution of the Commission on Transnational Corporations and the United Nations Centre on Transnational Corporations to the work of the Preparatory Committee for the United Nations Conference on Environment and Development (E/C.10/1991/3 and Add.1), para. 50.

7/ World Commission on Environment and Development, Our Common Future (London, Oxford University Press, 1987), pp. 222-223: "... all industrial enterprises, trade associations, and labour unions should establish company-wide or industry-wide policies concerning resource and environmental management, including compliance with the laws and requirements of the country in which they operate".

8/ Amoco Corporation has informed the United Nations Centre on Transnational Corporations that its Board of Directors in April 1990 created a major new committee to oversee environmental, health and safety matters. A majority of the five-member committee were non-employee directors and the committee was chaired by a non-employee director (Benchmark Corporate Environmental Survey ...).

Notes (continued)

9/ International Chamber of Commerce, Business Charter for Sustainable Development, (Paris, 1991): "... to establish policies, programmes and practices for conducting operations in an environmentally sound manner".

10/ Op. cit.: "... to recognize environmental management as among the highest corporate priorities and as a key determinant to sustainable development".

See also: Boise Cascade, Environmental Policy: Beyond Compliance (Boise, Idaho, 1990): "Make environmental considerations a high priority in our business decision-making, emphasizing environmental responsibility throughout the company at all levels of the organization"; and policy statement by the Chairman of the Board of Sandoz, Made in Schweizerhalle (Basel, Switzerland, 1987): "More than ever before we shall weigh pro and cons between benefits and potential dangers, and if necessary, ignore purely economic considerations".

11/ Elements expected in a corporate-wide policy statement on environment and development include the firm's commitment to:

(a) Protect the global environment and preserve and improve the local living environment;

(b) Protect ecosystems and preserve biodiversity;

(c) Incorporate environmentally sound technologies into operations whenever possible;

(d) Conserve resources and convert to environmentally sound renewable energy sources, wherever appropriate;

(e) Minimize the generation of waste and the emission of hazardous substances;

(f) Minimize the risks from hazardous production processes;

(g) Ensure the environmental soundness of products;

(h) Protect the health and safety of employees and local citizens;

(i) Disclose information on environmental matters;

(j) Consult with local communities, governmental authorities and international organizations.

See also World Conservation Union, Caring for the Earth, A Strategy for Sustainable Living (1991), chap. 17: "[by the Year 2000] corporate environmental policies published by at least 75 per cent of major and multinational companies".

Notes (continued)

12/ Subjects that could be covered by corporate-wide operational policies are (a) air quality and pollution, (b) water quality and pollution, (c) soil quality and pollution, (d) noise pollution, (e) handling and storage of hazardous substances, (f) waste reduction, (g) waste disposal, (h) radiation protection, (i) accident prevention, (j) emergency preparedness, and (k) worker health and safety.

Responses to a survey undertaken by the United Nations Centre on Transnational Corporations indicate that the Kubota Corporation, Japan, has a policy of a 20 per cent cut in usage of electricity and oil by March 1994. Toyota Motor Corporation has plans for a 10 per cent cut in usage of electricity by 1995 and for fixation of carbon dioxide by afforestation. TI Japan has as a corporate goal the abolition of use of chloro-fluorocarbons by the end of 1993 (Benchmark Corporate Environmental Survey ...).

13/ VARTA Batterie AG has informed the United Nations Centre on Transnational Corporations that its environmental protection policy is related to all products from "cradle to grave", that is, that research and development had been undertaken to minimize the amount of hazardous materials in products and production; efforts were being made to minimize emission, wastes and promote recycling; products were being used which minimize risks, and cause little or no pollution; hazardous materials were minimized at their source; and recollection and recycling were being promoted, where feasible (Benchmark Corporate Environmental Survey ...).

Imperial Chemical Industries (ICI) operates rigorous testing and safety controls when developing new products which are conducted on many different organisms, plants and insect varieties. It follows its products through to the user and implements education and training programmes in many parts of the world to help to ensure that customers are able to handle, use, store and dispose of its products safely (Benchmark Corporate Environmental Survey ...).

14/ United Nations, United Nations Centre on Transnational Corporations, Criteria ...: "Encourage overseas affiliates to modify procedures in order to reflect local ecological and social realities". See also International Labour Office, ILO Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy (Geneva, 1977): "Multinational enterprises should take fully into account established general policy objectives of the countries in which they operate. Their activities should be in harmony with the development priorities and social aims and structure of country in which they operate".

15/ International Round-table on Mining and the Environment, Mining and Environment Guidelines (Berlin, June 1991): "Encourage long-term mining investment by having clear environmental standards with stable and predictable environmental criteria and procedures". See also World Resources Institute, Guidelines for Growth: Multinational Corporations and Environment in Developing Countries (Washington D.C., 1984): "Host Governments should provide a stable and predictable business climate; establish a regulatory

Notes (continued)

process that is fair, efficient, predictable and allows participation by all concerned parties; and enforce their environment and health regulations even handedly among multinationals, State enterprises, and domestic companies".

16/ The Government of Germany has announced that German car manufacturers should be able to de-manufacture their cars so that there are fewer auto parts and less waste needing safe disposal.

17/ The possible contents of a sustainable development and transnational corporation database are:

(a) Transnational corporate impact on environment and development in host countries;

(b) The influence of environmental and developmental regulatory frameworks on the behaviour of transnational corporations;

(c) Green investment patterns;

(d) Existing regional and international government-agreed guidelines involving transnational corporations;

(e) Existing regional and international industry trade association guidelines;

(f) Corporate managerial practices;

(g) Best corporate operational policies and programmes;

(h) High hazard products, technologies, processes and services;

(i) Environmentally sound technology;

(j) Demonstration projects on innovative ways to adapt environmental sound technology to local industry.

18/ World Resources Institute, Guidelines for Growth ..., p. 7: "multinational companies should have an environmental policy statement or code of conduct which should be firmly supported by corporate leadership, widely circulated inside the company and publicized outside the company in the host country".

19/ United Nations, United Nations Centre on Transnational Corporations, Criteria ...: "Perform an environmental audit of ongoing activities, particularly those in developing countries, to verify that the criteria have been adequately considered". See also Coalition for Environmentally Responsible Economics, The Valdez Principles (Boston, 1989):

Notes (continued)

"We will conduct and make public an annual self-evaluation of our progress in implementing these principles and in complying with all applicable laws and regulations throughout our world-wide operations. We will work toward the timely creation of independent environmental audit procedures which we will complete annually and make available to the public".

The Amoco Corporation has informed the United Nations Centre on Transnational Corporations that corporate staff performed environmental audits on a schedule of two to five years, depending on the size of the plant, and that company staff did it more frequently; in addition, Alluisse Lonza Group has informed the Centre that the corporate staff ecology and risk management performs, at least every two years, coordinated ecology and risk management audits of all divisional facilities and undertakes annual ecology and risk management reviews of the divisional activities (Benchmark Corporate Environmental Survey ...).

20/ World Conference on Environmental Management, Final Declaration of the Second World Industry Conference on Environmental Management (ICC, Rotterdam, 1991), p. 4: "We recommend that enterprises measure their environmental performance and conduct internal environmental audits and assessments of compliance with company requirements and legal requirements, as outlined in the ICC guides for effective environmental auditing".

21/ Op. cit.: "We see the need to strengthen new relationships between governments, business, other stakeholders and the public at large. We encourage ICC to arrange regional environmental round-tables to bring together regional leaders from industry, Governments, trade unions, science and the community of non-governmental organizations to explore specific policies and initiatives".

See also: European Council of Chemical Manufacturers Federations, A Guide to Safe Warehousing for the European Chemical Industry (Brussels, 1987): "Maintain liaison with local authorities and other bodies for mutual consultation and advice on safety and environmental protection"; and World Conservation Union, Caring for the Earth ..., chap. 11: "Give support, including financial backing, to international and national agreements and organizations that protect the resource base, and promote research that will allow its sustainable use".

22/ United Nations, United Nations Centre on Transnational Corporations, Criteria ...: "Share the experiences with these criteria with local governments, national authorities and the United Nations". See also European Council of Chemical Manufacturers Federations, A Guide to Safe Warehousing ...: "Maintain liaison with local authorities and other bodies for mutual consultation and advice on safety and environmental protection".

Notes (continued)

23/ Report of the Secretary-General of the United Nations Conference on Environment and Development on the transfer of technology (A/CONF.151/PC/53), para. 63.

24/ World Conference on Environmental Management, Final Declaration ...: "Explore with industry and international organizations the additional funding mechanisms and other incentives necessary to make technology available to users unable to pay for it".

See also United Nations, United Nations Centre on Transnational Corporations project on options to facilitate the transfer of environmentally sound technologies to developing countries (New York, 1991), in which various mechanisms are analysed, including: (a) concessional pricing; (b) local off-set agreements; (c) tax incentive and disincentive systems; (d) tariff incentive and disincentive systems; (e) limits on supplemental charges; (f) bulk purchase agreements; and (g) purchase guarantee agreements.

25/ Glaxo Holding has informed the United Nations Centre on Transnational Corporations that its international environmental programme does include contributions to local environmental initiatives inside and outside of the United Kingdom of Great Britain and Northern Ireland. An example of this would be a recent donation to a trust fund to be coordinated by the World Wildlife Fund for Nature to provide funds for the Mweka College of African Wildlife Management at Moshi, United Republic of Tanzania. In addition, local companies have the ability to make their own contributions to local environmental and nature societies without consulting headquarters (Benchmark Corporate Environmental Survey ...).

26/ BHP (Broken Hill Proprietary Company Limited), Environmental Issues Guidelines for Joint Ventures, Mergers, Acquisitions and Divestments (Melbourne, Australia, undated):

> "In any transaction, BHP aims to identify and assess all actual or potential liabilities which may arise from site pollution or disturbance and public liability. In general, the circumstances giving rise to such recognition may be classified as: (a) pollution, contamination or third party liability arising from our activities, or (b) the deliberate disturbance of sites in the course of mining or petroleum production, giving rise to an obligation to rehabilitate sites at the termination of operations".

See also Bank of America, Environmental Principles (San Francisco, 1991): "... make a special effort to identify businesses and organizations that are attempting to find solutions to environmental problems and provide appropriate support".

27/ United Nations, United Nations Centre on Transnational Corporations, Criteria ...: "Review and modify corporate structure, lines of responsibility and internal reporting mechanisms to reflect sustainable development policy".

Notes (continued)

BMW has informed the United Nations Centre on Transnational Corporations that, in case of potentially serious environmental problems, every local plant has its own environmental protection staff who report directly to BMW AG, Munich (Benchmark Corporate Environmental Survey ...).

See also International Chamber of Commerce, Business Charter ...: "To integrate these policies, programmes and practices fully into each business as an essential element of management in all its functions".

28/ Keidanren, Keidanren Global Environmental Charter (Tokyo, 1991): "Companies should establish an internal system to handle environmental issues by appointing a director and creating a department in charge of environmental problems".

29/ Coalition for Environmentally Responsible Economics, The Valdez Principles ...:

> "... to sustain a process to ensure that the Board of Directors and Chief Executive Officer are kept informed of and are fully responsible for all environmental matters. We will establish a Committee of the Board of Directors with responsibility for environmental affairs. At least one member of the Board of Directors will be a person qualified to represent environmental interests to come before the company."

See also: World Conservation Union, Caring for the Earth ...: "Make a member of the company's board, preferably the Chief Executive Officer, responsible for environmental policy, and provide adequate professional support"; note 8 above; and Boehringer Ingelheim, Directions for Environmental Protection within the Corporation (Boehringer Ingelheim, Germany, 1984):

> "The Board of Directors (Zentralgeschäftsleitung):
>
> "(a) Determines the corporate aims, focal points and, if necessary, public relations work required to put the principles of environmental protection into practice;
>
> "(b) Appoints a Central Environmental Protection Commission;
>
> "(c) Sets up an Environmental Protection Office directly responsible to the Board of Directors, production and engineering area;
>
> "(d) Assigns to the Central Environmental Protection Commission the responsibility for central environmental protection tasks;
>
> "(e) Controls the observance of their directives and in the case of divergences either modifies the aims or lays down the procedure to be followed;

Notes (continued)

"(f) Reviews the principles and supervises their observance, particularly in respect of their effects on social policy" (unofficial translation).

30/ Task force on the Churches and Corporate Responsibility, Corporate Environmental and Social Responsibilities: Recommendations to the United Nations Conference on Environment and Development Third Preparatory Meeting (Toronto, Canada, July/August 1991), para. 28:

"A key component of the code is the requirement for annual reporting to directors, shareholders and other stakeholders on compliance of corporate practices with the code and for periodic independent audits to verify the accuracy of the information contained in the report. Such mechanisms are essential if codes of practice are to be effective tools of accountability to society".

31/ Allied Signal Inc., Health, Safety and Environment Policy (Morristown, New Jersey, 1988): "Managers have a special obligation to keep informed about health, safety and environmental risks and standards and to advise higher management promptly of any adverse situation which comes to their attention".

32/ General Assembly resolution 42/186, annex, Environmental Perspective to the Year 2000 and Beyond, para. 47 (h): "... transnational corporations should establish progressively in the host countries the skills and technological capacities needed for environmentally sound management of industry, even in the absence of legislation on desirable environmental standards".

Amoco Corporation initiated in 1989 a comprehensive environmental training programme designed especially for energy exploration and production workers. It deals with all major categories of environmental protection and compliance. The programme is centred around manuals and videotapes and is available in editions tailored for each of three employee groups: field personnel, engineers and managers. Amoco spent more than $400,000 to develop the programme and has succeeded in marketing it to most United States explorers for oil and natural gas (Amoco, Span (Chicago, 1990), vol. XXX, No. 3).

33/ International Chamber of Commerce, Business Charter ...: "... educate, train and motivate employees to conduct their activities in an environmentally responsible manner".

See also: Keidanren, Keidanren Global Environmental Charter ...: "The employees shall be educated to understand the importance of daily close management to ensure the prevention of pollution and most efficient use of energy and resources"; and Chevron, Strategic Management in the Environmental Area (Chevron, San Francisco): "Conduct and periodically update training

Notes (continued)

programmes to help employees understand how the social, political and legal aspects of society's environmental values affect our business" (Chevron environmental policy).

34/ European Council of Chemical Manufacturers Federations, A Guide to Safe Warehousing ...:

> "... evaluate the capacity of the contractor to safely manage the storage/handling of the contracted materials, evaluate the suitability of the warehouse and its equipment, clearly specify in the contract the various responsibilities; specify in the contract all details relevant to safety, carry out the necessary inspections and audits."

35/ World Resources Institute, Guidelines for Growth ..., p. 8: "Companies that are engaged in joint ventures or that employ contractors and/or distributors should make a diligent good faith effort to assure that these parties conform to sound environmental and health practices".

Alluisse Lonza Group has informed the United Nations Centre on Transnational Corporations that the firm periodically audits outside contractors to ascertain that they apply safety and environmental standards at least equivalent to those of the company. In the case of deviations, a time limit is set in which to adapt to the required level, failing which the contract is cancelled. In the case of outside contractors for waste disposal, Alluisse Lonza satisfies itself that they deal with the materials safely, effectively and legally, and confirms that waste consignments reach the specified final disposal site and are disposed of in the agreed manner (Benchmark Corporate Environmental Survey ...).

See also Phillips Company, Environment within the Phillips Concern (Amstelveen, Netherlands, 1987):

> "Apart from the normal organization there are a number of companies with a special relationship to Phillips. Such as legally independent companies and joint ventures. For all matters discussed in this guideline, the environmental relationship to the Phillips Company must be formulated explicitly".

36/ Letter dated 31 May 1990 from the Chairman of the reconvened special session of the Commission on Transnational Corporations to the President of the Economic and Social Council (E/1990/94), annex, para. 21: "Transnational corporations should make every effort so to allocate their decision-making powers among their entities as to enable them to contribute to the economic and social development of the countries in which they operate".

37/ Possible supplemental items to be taken into account in an environmental and development impact assessment are:

Notes (continued)

(a) The extent to which the activity affects major environmental concerns, such as biodiversity;

(b) The extent to which the facility intends to use and conserve common public resources;

(c) The extent to which the facility uses environmentally sound renewable resources;

(d) The extent to which the technologies will require an upgrading of employee and managerial skills in order to ensure their safe implementation;

(e) The extent to which the technologies are likely to impact on gender and on ethnic, religious and socio-economic groups.

38/ United Nations, United Nations Centre on Transnational Corporations, Transnational Corporations and Industrial Hazards Disclosure (ST/CTC/111).

39/ Draft decision submitted by the Chairman of Working Group III of the Preparatory Committee for the United Nations Conference on Environment and Development (A/CONF.151/PC/WG.II/L.19), para. 32 (a):

> "Multinational companies (MNC) and other large-scale enterprises should introduce policies and commitment to adopt equivalent or not less stringent standards of operation with reference to waste generation and disposal, while Governments of developing countries are invited to make efforts to establish regulations which require such standards".

See also Organisation for Economic Cooperation and Development (OECD): "Guiding principles for accident prevention, preparedness and response" (ENV/EC/ACC/(90)1/Rev.2) (Paris, 1981), p. 76:

> "The degree of safety of installations which result from an investment from an OECD-based enterprise, or which incorporate process or other safety-related technology transferred from an OECD country, should be the highest level of safety reasonably practicable according to the current state of knowledge. The objective should be to achieve a level of safety at least equivalent to that reached for similar facilities in the country of origin".

40/ Alluisse Lonza Group has informed the United Nations Centre on Transnational Corporations that environmental problems are treated at the source whenever possible. Emphasis is placed on minimizing and/or recycling of solid, liquid and gaseous wastes. In all cases, when the additional expenditure is reasonable and a significant reduction in the pollution load beyond that required by the law can be reached, the least polluting option is chosen. At the same time, solutions are sought that are adapted to the local situation and are as efficient as possible in the use of energy materials.

Notes (continued)

41/ Allied Signal Inc., Health, Safety and Environment Policy ...: "The corporation will stop manufacturing or distributing any product or carrying out any operation if the health, safety or environmental risks or costs are unacceptable".

See also policy statement by the Chairman of the Board of Sandoz, cited in note 10 above.

AgipPetroli has informed the United Nations Centre on Transnational Corporations that it will close down a refinery, located in the city of RHO outside Milan, in order to avoid environmental risks for the surrounding area and to improve living conditions. This agreement was reached with the close cooperation of the local government and the Italian Ministry of the Environment (Benchmark Corporate Environmental Survey ...).

42/ Coalition for Environmentally Responsible Economics, The Valdez Principles ...: "... minimize the environmental, health and safety risks to our employees and the communities in which we operate by employing safe technologies and operating procedures and by being constantly prepared for emergencies".

43/ Organisation for Economic Cooperation and Development, "Clarification to the reference to environmental policies in guidelines for multinational enterprises" (1985); reprinted in Organisation for Economic Cooperation and Development, OECD and the Environment (1986) (hereinafter referred to as "OECD Multinational Guidelines"), p. 11:

> "... assess, and take into account in decision-making, foreseeable environmental and environmentally related health consequences of their activities, including siting decisions, impact on indigenous natural resources and foreseeable environmental and environmentally related health risks of products as well as from the generation, transport and disposal of waste".

See also: Apple Computer Inc., Policy on Environmental Health and Safety (Cupertino, California, 1990): "Strive to anticipate future environmental health and safety risks and regulatory requirements, and have a proactive approach to dealing with them whenever appropriate"; and Japan Chemical Industry Association, Guiding Principles for Improvement on Environment, Health and Safety of Japan Chemical Industry Association (Tokyo, 1991): "To promote the research and investigation of the health, safety and environmental effects of our products and materials handled".

44/ Coalition for Environmentally Responsible Economics, The Valdez Principles ..., p. 9: "We will take responsibility for any harm we cause to the environment by making every effort to fully restore the environment and to compensate those persons who are adversely affected".

Notes (continued)

45/ United Nations Industrial Development Organization, Report on the Conference on Ecologically Sustainable Industrial Development, Copenhagen, Denmark, October 1991 (to be issued):

> "Ministers encouraged all companies to ... subscribe to a rational and precautionary approach to anticipating and preventing the causes of serious or irreversible environmental degradation consistent with scientific and technical understanding and the economical use of resources".

46/ Gechem/Recticel, Management Declaration on Environment and Safety (Brussels, 1990):

> "It is our decision that safety and environment concerns should become second nature for all of us. The Recticel management wants to take the best possible care of its employees and the environment. It is therefore our target to implement environmental and safety excellence throughout the whole Recticel group. The Recticel management ensures that all plants shall ... use no raw materials upon which a reasonable doubt lies, as to their toxicity or environmental implication ...".

See also World Conference on Environmental Management, Final Declaration ..., p. 3: "Recognizing the un-attainability of certainty and the risk attached to both premature and delayed action, we urge that standards and regulations be reassessed periodically to monitor their effectiveness as well to incorporate advances in scientific knowledge," p. 3.

47/ United Nations, United Nations Centre on Transnational Corporations, Criteria ...: "Reward employees who discover and report environmental problems or who recommend new, environmentally sound products and processes".

48/ Coalition for Environmentally Responsible Economics, The Valdez Principles ...: "... and we will not take any action against employees who report any condition that creates a danger to the environment or poses health and safety hazards".

49/ European Council of Chemical Manufacturers Federations, Principles and Guidelines for the Safe Transfer of Technology (Brussels, 1987):

> "Responsibility for siting and general layout, initial environmental impact assessment, application for all required permits, detailed engineering, plant erection, process operation, plant maintenance and modifications, provision of information to local authorities on safety, health and environmental issues, training and supervision of the work force, and establishment of safety and environment protection procedures should normally be part of the technology receiver's responsibilities".

Notes (continued)

50/ United Nations, United Nations Centre on Transnational Corporations, Criteria ...: "Report publicly on the enterprise's most hazardous products processes and toxic emissions. Distribute widely information on the methods in place to reduce these potential hazards and to cope with unanticipated emergencies".

Norsk Hydro (UK) broke new ground in 1990 and was well ahead of other European companies when it published the first report on the environmental impact of a firm's activities verified by an external auditor. It also anticipated a new European Economic Community regulation likely to come into effect at the end of 1991, calling for industrial companies to carry out regular environmental audits (Profile Magazine, 1991).

51/ Elements for inclusion in safety information systems are:

(a) Information on safe use in appropriate languages and/or symbols or signs;

(b) Clear identification and dating of each batch of chemicals;

(c) Storage instructions;

(d) Antidote instructions;

(e) Disposal instructions;

(f) Emergency contact numbers and addresses.

52/ European Council of Chemical Manufacturers Federations, Principles and Guidelines ...: "It is a fundamental principle that the highest degree of safety ... reasonably practicable according to the current state of knowledge is pursued when considering the transfer of a technology which should have the objective of aiming for a level of safety, health protection and protection of the environment equivalent to that achieved in the home facilities of the technology supplier".

Imperial Chemical Industries (ICI) has informed the United Nations Centre on Transnational Corporations that it operates rigorous testing and safety controls when developing new products which are conducted on many different organisms, plants and insect varieties. It follows its products through to the user and implements education and training programmes in many parts of the world in order to help to ensure that customers are able to handle, use, store and dispose of its products safely (Benchmark Corporate Environmental Survey ...).

53/ Toyota Motor Corporation, Toyota Plant Environmental Measures (Toyota City, 1990):

Notes (continued)

"Furthermore, with regard to target levels of air, noise and other forms of pollution set for various measures, Toyota does not stop at simply complying with the various laws and ordinances and also the agreements, guidance standards and other terms agreed upon, but also places great emphasis on confirming appraisal after the measures have been implemented".

54/ United Nations, United Nations Centre on Transnational Corporations, Benchmark Corporate Environmental Survey: Protection of the Atmosphere, Land Resources, Conservation of Biological Diversity, Environmentally Sound Management of Biotechnology (ST/CTC/SER.C/1).

See also: Environment Northern Seas, Summary statement, Stravanger, Norway, 26-30 August 1991: "[actions] for the scientific community ... systematic monitoring systems should be developed in order to verify the effects of past decisions and as a basis for further decision making" (text provided by State Pollution Control Authority, Norway); and Chemical Manufactures Association (CMA), Improving the Performance in the Chemical Industry: Ten Steps for Pollution Prevention (Washington, 1990):

"As a part of the waste and release reduction and management code, companies are requested to send a three-part report to CMA or its designated agents:

"1. Self-evaluation form: each company must report the number of facilities in each of the six implementation stages. CMA will compile these data to determine industry-wide progress.

"2. Release trend data: each year companies must send release data based upon the toxic release inventory that most members submit to EPA ....

"3. Waste data: beginning with the 1990 reporting year, members are required to complete a waste survey".

55/ Glaxo Holding has informed the United Nations Centre on Transnational Corporations that it had, as an important aspect of its international environmental programme, to act as a central clearing-house and database on environmental matters and the dissemination of environmental information throughout the group (Benchmark Corporate Environmental Survey ...).

56/ United Nations, United Nations Centre on Transnational Corporations, Criteria ...: "Arrange for environmentally safer technologies to be available to affiliates in developing countries without extra internal charges."

Notes (continued)

57/ Bayer AG, Policy Guidelines for Environmental Protection and Safety at Bayer (Leverkusen, Germany, 1989):

> "The term technology transfer covers the exchange of know-how on production processes and technical installations with Bayer's subsidiaries or with third parties:
>
> "Only well tried and tested technologies are passed on to subsidiaries or third parties;
>
> "The subsidiaries ensure that the measures for environmental protection, as well as for employee and plant safety, are developed and applied according to the same principles as those of the parent company;
>
> "Know-how from third parties relating to processes or technical installations is only adopted after thorough safety tests".

58/ Organisation for Economic Cooperation and Development, "Guiding principles for accident prevention, preparedness and response" (ENV/EC/ACC/(90)1/Rev.2), Paris, 1991.

59/ See European Council of Chemical Manufacturers Federations, Principles and Guidelines ..., pp. 14-16.

60/ See E/C.10/1991/3, paras. 37-48.

61/ United Nations, United Nations Centre on Transnational Corporations, Criteria ...: "Report publicly on the enterprises most hazardous products, processes, and toxic emissions". See also United States Environmental Protection Agency, Chemical Releases and Chemical Risks: A Citizen's Guide to Risk Screening (toxic release inventory) (September, 1989).

62/ World Conference on Environmental Management, Final Declaration ..., p. 3: "Recognizing the un-attainability of certainty and the risk attached to both premature and delayed action, we urge that standards and regulations be reassessed periodically to monitor their effectiveness, as well as to incorporate advances in scientific knowledge".

63/ 3M Corporation, Corporate Environmental Policy (St. Paul, Minnesota, 1990):

> "3M will continue to recognize and exercise its responsibility to ... assist, wherever possible, governmental agencies and other official organizations engaged in environmental activities. This policy applies to all 3M US and OUS [outside United States] operations".

Notes (continued)

64/ World Conservation Union, Caring for the Earth ..., chap. 11: "Ensure that uniformly high standards are maintained throughout the company's operations, and that technology that is not environmentally acceptable is eliminated everywhere".

65/ See United Nations Development Programme, "Draft principles and guidelines for environmental management and sustainable development in technical assistance", mimeographed, p. 7.

Possible areas for funding by international organizations are:

(a) Technological costs accrued due to signing internationally binding environmental agreements:

(b) Supplemental costs of sophisticated, sound technologies;

(c) Royalty payments;

(d) Infrastructural up-grading for technology absorption;

(e) Local education and training programmes:

(f) Education exchange;

(g) Model projects to test technological appropriateness;

(h) Local research and development for technology development and adaptation.

66/ International Round-table on Mining and the Environment, Mining and Environment ...,: "Adopt risk analysis and risk management in the development of regulation and in the design, operation and decommissioning of mining activities, including the handling and disposal of hazardous mining and other wastes".

67/ World Conference on Environmental Management, Final Declaration ..., p. 4: "We subscribe to a rational and precautionary approach to anticipating and preventing the causes of serious or irreversible environmental degradation consistent with scientific and technical understanding and economic use of resources".

68/ Coalition for Environmentally Responsible Economics, The Valdez Principles ...: "We will invest in improved energy efficiency and conservation in our operations. We will maximize the energy efficiency of products we produce and sell".

Notes (continued)

AgipPetroli's guidelines for waste handling call for the identification of principal production sources of waste and the elaboration of proposals for reducing quantities and for putting them to different uses, as well as for the evaluation of the quality of the produced waste and the elaboration of proposals for qualitative improvement, either through intervention during the process or through eventual segregation.

69/ United Nations, United Nations Centre on Transnational Corporations, Draft code of conduct, para. 41: "Transnational corporations should, in performing their activities, take steps to develop and apply adequate technologies for this purpose".

70/ Japan Chemical Industry Association, Guiding Principles ...: "To promote reasonable measures for the reduction of pollution ... in our operations and the re-use and the recycling of wastes" (Benchmark Corporate Environmental Survey ...).

DAF NV informed the United Nations Centre on Transnational Corporations that it takes into account the possibility of recycling in the development of vehicles and components, and more particularly in the choice of materials. The relatively large proportion of metal materials used in the building of commercial vehicles and buses offers major advantages in that respect. It means that 95 per cent of the end product can be re-used at the end of its life cycle (Benchmark Corporate Environmental Survey ...).

71/ Organisation for Economic Cooperation and Development, Multinational Guidelines, p. 11:

> "... Take appropriate measures in their operations to minimize the risk of accidents and damage to health and the environment and to cooperate in mitigating adverse environmental effects ... by enabling their component entities to be adequately equipped, especially by providing them with adequate knowledge and assistance".

See also Business Council for Sustainable Development, Changing Course (Boston, Massachusetts, MIT PRESS, forthcoming):

> "In transferring technology to other parties and countries, multinational corporations should, as an obligation, provide 'prior information' regarding its environmental implications. They should also undertake to provide 'best-practice' technology in terms of its capacity to minimize environmental impacts and to maximize sustainability. The multinational exporter would then be obliged to inform the intended receiver in advance about the environmental implications of the technology system involved, including parameters such as energy and material usage, all toxic and non-toxic emissions, by-products and wastes, re-use and recycling of output, and all maintenance requirements for safe and reliable operation. The objective is to enable the receiver to evaluate the

Notes (continued)

technology in terms of its suitability for the specific conditions and forms of use and exploitation in the receiving country, prior to making the decision whether or not to import the technology".

72/ World Commission on Environment and Development, Our Common Future ..., p. 231: "[large industrial corporations, particularly transnational corporations] should adopt the highest safety and health protection standards practicable and assume responsibility for safe plant and process design and for staff training".

73/ Organisation for Economic Cooperation and Development, Multinational Guidelines, p. 11:

"... Take appropriate measures in their operations to minimize the risk of accidents and damage to health and the environment, and to cooperate in mitigating adverse environmental effects ... by implementing education and training programmes for their employees".

74/ Keidanren, Keidanren Global Environmental Charter ...: "Companies shall make available in Japan and throughout the world their technologies, know-how and expertise for dealing with environmental problems and reducing energy and other resource use".

75/ Canadian Chemical Producers Association, Responsible Care (Ottawa, 1990): "Corporations should increase the emphasis on the understanding of existing products and their uses and ensure that a high level of understanding of new products and their potential hazards is achieved prior to and throughout commercial development".

See also Coalition for Environmentally Responsible Economics, The Valdez Principles ..., p. 9: "We will sell products or services that minimize adverse environmental impacts and that are safe as consumers commonly use them. We will inform consumers of the environmental impacts of our products or services".

76/ International Chamber of Commerce, Business Charter ...: "To develop and provide products or services that have no undue environmental impact and are safe in their intended use, that are efficient in their consumption of energy and natural resources, and that can be recycled, re-used or disposed of safely".

Notes (continued)

See also Boise Cascade, Environmental Policy ...:

"Boise Cascade's approach to its environmental responsibilities goes beyond complying with applicable environmental laws and regulations. We also search for constructive, practical ways in which we can make real contributions to the environment beyond what we are required to .... We believe every company has an obligation to ensure that its business operations pose no significant risk to human health or to the environment".

77/ United Nations, United Nations Centre on Transnational Corporations, Criteria ...: "Sustainability will require a wide variety of 'nature-sparing' technological changes (energy efficiency, waste recycling), as well as 'nature-enhancing' ones (alternative energy sources, sustainable forestry)". See also Japan Chemical Industry Association, Guiding Principles ...: "To develop safe products and process technologies by investigating aspects of environment, health and safety in the stage of research and development".

78/ United Nations, United Nations Centre on Transnational Corporations, Criteria ...: "Establish and publish a transnational corporate sustainable development policy statement emphasizing sustainable growth, environmental protection, resource use, worker safety and accident prevention".

79/ 3M, Corporate Environmental Policy ...: "3M will continue to recognize and exercise its responsibility to ... Develop products that will have a minimum effect on the environment .... This policy applies to all 3M US and OUS [outside United States] operations".

80/ International Chamber of Commerce, Business Charter ...:

"... to measure environmental performance, to conduct regular environmental audits and assessments of compliance with company requirements, legal requirements (and these principles) and periodically to provide appropriate information to the Board of Directors, shareholders, employees, the authorities and the public".

See also World Conservation Union, Caring for the Earth ..., chap. 11: "Confidentiality must be respected, but should not be used as an excuse to frustrate the release of information that is in the public interest".

81/ United Nations, United Nations Centre on Transnational Corporations, Benchmark Corporate Environmental Survey: Management Systems and Methodology (ST/CTC/SER.C/4). See also report of the Secretary-General on information disclosure relating to environmental measures (E/C.10/AC.3/1990/5).

82/ Report of the Secretary-General on accounting for environmental protection measures (E/C.10/AC.3/1991/5).

Notes (continued)

83/ Pearce and others, Blueprint for a Green Economy (London, Earthscan Publications, 1989).

84/ Report of the Secretary-General on accounting for environmental protection measures (E/C.10/AC.3/1991/5).

85/ Arthur Andersen and Co., Environmental Liabilities ... Is Your Company at Risk (New York, 1990). See also Van Leer Packaging Worldwide, Group Policy on Environmental Affairs (Netherlands, 1990):

> "An acquisition of other companies or assets cannot be made unless thorough authoritative investigations of potential environmental liabilities have been made and such risks, if present, have been quantified. When swelling one of our companies or assets, extreme care must be taken to prevent the retention of unforeseen and/or non-quantified environmental liabilities".

86/ J. Goodfellow and A. Willis, "What's the Name of the Game", CA Magazine, March 1991. See also: International Chamber of Commerce, Environmental Auditing (Paris, June 1989); J. Elkington, The Environmental Audit: A Green Filter for Company Policies, Plants, Processes and Products (United Kingdom, World Wildlife Fund for Nature, Sustain Ability Ltd., 1990); and Touche Ross International, "Environmental auditing", Journal for Environmental Liability (September 1988), No. 3.

87/ Coalition for Environmentally Responsible Economics, The Valdez Principles ..., p. 9: "We will take responsibility for any harm we cause to the environment by making every effort to fully restore the environment and to compensate those persons who are adversely affected".

Chevron takes responsibility for how its operations and products affect the environment. Recognizing that industry is responsible for solving the problems it causes, the company acknowledges that it continuously must improve its performance in areas such as emission reduction, spill prevention and fire safety. Chevron works to improve its technologies with the goals of cleaner air, water and soil. It strives to prevent accidents and spills. If, despite Chevron's best efforts, these mishaps occur, the company responds quickly and compensates those who have been affected adversely.

88/ Note by the Secretariat on environmental accounting for sustainable development (A/CONF.151/PC/89).

89/ R. N. Stavins, Innovative policies for sustainable development in the 1990s: economic incentives for environmental protection, EPA-ECE Workshop on the Economics of Sustainable Development, Washington, D.C., 23-26 January 1990.

Notes (continued)

90/ Organisation for Economic Cooperation and Development, "Guiding principles concerning international economic aspects of environmental policies", recommendations adopted on 26 May 1972 (C(72)128):

> "The principle to be used for allocating costs of pollution prevention and control measures to encourage rational use of scarce environmental resources and to avoid distortions in international trade and investment is the so-called 'Polluter-Pays Principle'. This principle means that the polluter should bear the expenses of carrying out the above-mentioned measures decided by public authorities to ensure that the environment is in an acceptable state. In other words, the cost of these measures should be reflected in the cost of goods and services which cause pollution in production and/or consumption. Such measures should not be accompanied by subsidies that would create significant distortions in international trade and investment".

91/ Selected items that could be included in an environment and development report are:

(a) The impact on natural resources and wildlife;

(b) Resource and energy conservation and efficiency;

(c) Waste minimization;

(d) Level of education and training of the workforce;

(e) Resources directed to environmentally sound research and development;

(f) Transfer, adaptation and development of environmentally sound technologies;

(g) Economic impact in host developing countries.

World Conference on Environmental Management, Final Declaration ...: "We will periodically provide information to shareholders, employees, Governments, and the public, and recommend especially that companies include a statement by the Board of Directors or the CEO in their annual reports or in a special environment report, on the environmental status of the company".

92/ G. E. Schuf, International economic policies and sustainable development, EPA-ECE Workshop on the Economics of Sustainable Development, Washington, D.C., 23-26 January 1990.

93/ World Conference on Environmental Management, Final Declaration ...: "Provide the infrastructure for technical and vocational education and support a continuous activity in research and development, possibly funded by international environmental funds".

Notes (continued)

94/ Business Council for Sustainable Development, Changing Course ...: "Multinational corporations should lead in environmental excellence through national and local industry associations and other non-governmental bodies, to encourage other companies to adopt comparable standards, and to influence governments to enforce technically sound environmental standards."

95/ Toyota Motor Corporation, Toyota Plant Environmental Measures ...:

"Toyota has concluded agreements on the prevention of pollution with various local authority bodies near the location of the plants. These agreements stipulate levels of pollution more stringent than those set out by the various laws and ordinances which govern pollution. Toyota adheres meticulously to these levels and cooperates with local communities in pollution prevention activities".

96/ Examples of current international and regional guidelines and conventions are:

(a) International Convention for the Prevention of Pollution from Ships, 1973 (as modified by the Protocol of 1978, MARPOL 73/78);

(b) International Labour Organisation, Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy, Geneva, 1977;

(c) United Nations Convention on the Law of the Sea, 1982;

(d) Vienna Convention on the Protection of The Ozone Layer, 1985;

(e) Food and Agriculture Organization of the United Nations, International Code of Conduct on the Distribution and Use of Pesticides, Rome, 1986;

(f) Organisation for Economic Cooperation and Development, Guidelines for Multinational Enterprises, Paris, 1986 (revised in 1991);

(g) Montreal Protocol on Ozone Depleting Substances, 1987;

(h) United Nations Environment Programme, London Guidelines for the Exchange of Information on Chemicals in International Trade, 1987;

(i) International Labour Organisation, Code of Practice, Safety, Health and Working Conditions in the Transfer of Technology to Developing Countries, Geneva, 1988;

(j) United Nations Environment Programme, APELL: Awareness and Preparedness for Emergencies at the Local Level: A Process for Responding to Technological Accidents, Paris, 1988;

Notes (continued)

(k) Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal, 1989;

(l) Convention for the Prohibition of Fishing with Long Drift Nets in the South Pacific, 1989;

(m) International Labour Organisation, Code of Practice Prevention of Major Accidents Hazards, Geneva, 1991;

(n) Bamako Convention on the Ban of the Import into Africa and the Control of the Transboundary Movement and Management of Hazardous Wastes within Africa, 1991;

(o) International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990;

(p) The London Dumping Convention, 1987.

97/ United Nations, United Nations Centre on Transnational Corporations, Draft code of conduct:

> "Transnational corporations shall carry out their activities in accordance with national laws, regulations, established administrative practices and policies relating to the preservation of the environment of the countries in which they operate, and with due regard to relevant international standards".

See also 3M Corporation, Corporate Environmental Policy ...: "3M will continue to recognize and exercise its responsibility to ... Assure that its facilities and products meet and sustain the regulations of all federal, state and local agencies".

98/ Examples of current industry-agreed guidelines and standards are:

(a) Canadian Chemical Producers Association, Responsible Care, Ottawa, 1990;

(b) Canadian Petroleum Association, Environmental Code of Practice, Ottawa, 1989;

(c) Chemical Manufactures Association, Responsible Care, 1989;

(d) European Council of Chemical Manufacturers Federations, A Guide to Safe Warehousing for the European Chemical Industry, Brussels, 1987;

(e) European Council of Chemical Manufacturers Federations, Principles and Guidelines for the Safe Transfer of Technology, Brussels, 1987;

(f) International Chamber of Commerce, Business Charter for Sustainable Development, Paris, 1991;

(g) Keidanren, Keidanren Global Environmental Charter, April 1991.

99/ Caterpillar, Inc., Report on the Annual Meeting of Stockholders (Peoria, Illinois, 1990):

> "It is no longer feasible for governments to dictate both objectives and the methods industry must take to meet those objectives. Caterpillar is calling for change in two significant areas. First, more teamwork between American industry, government and others concerned about the environment to set mutually agreed upon objectives. Second, industry should have more flexibility to come up with new and innovative ways of protecting the environment. Government should not try to regulate these methods as well".

100/ World Conference on Environmental Management, Final Declaration ...:

> "Bring together an international clearing-house for technology access which aims at coordinating existing databases and promote them in developing countries and Eastern Europe so that access to all sources of information becomes easier, especially for small and medium-sized enterprises".

101/ Task force on the Churches and Corporate Responsibility, Corporate Environmental and Social Responsibilities ..., para. 31 (b):

> "Require corporations to adopt and make public environmental and social codes of practice, develop standards for corporate reporting and accountability on compliance with such codes of practice, including the requirement that the accuracy of information be verified periodically by independent audit; such codes and standards as they apply to the foreign operations of corporations shall be comparable to the highest used in their home countries and consistent with the laws and regulations of the host country".